

The New Jersey Commission On Environmental Education

1998 Annual Report

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# The Purpose and Mission of the New Jersey Commission on Environmental Education

The New Jersey Commission on Environmental Education (NJCEE), as called for in the Environmental Education Act of 1996, was seated by Governor Christine Todd Whitman on November 21, 1997. The Commission currently has 29 voting members.

The mission of the Commission is "to develop in the citizens of New Jersey the knowledge, attitudes, values, skills and behaviors needed to maintain, protect and improve the environment." The challenge, through environmental education, is to develop citizens who are committed and able to work toward an environment capable of supporting different needs and that would ensure a sustainable future for New Jersey.

The purpose of the NJCEE is to advise and oversee the implementation of *Environmental Education in New Jersey: A Plan of Action*. The plan, which is a comprehensive strategy to foster environmental literacy statewide, represents the work of thousands of concerned citizens and has been recognized worldwide as a model for environmental education.

## Commission Accomplishments in 1998

The Commission, in its first year, was a member of the Coalition to Preserve Natural Resources and joined in a campaign for stable funding for the preservation of open space, farmland and historic sites. In November of 1998, New Jersey voters overwhelming approved Public Question Number One, launching a new era in natural resource protection by authorizing the state to spend \$1.4 billion dollars over 10 years to acquire open space - a step toward a sustainable future.

#### Additional Commission Achievements Include:

- Letter of introduction and Commission fact sheet sent to Governor Whitman and members of the New Jersey State Legislature;
- Leadership in the growth of statewide capacity to deliver environmental education to all citizens;
- Assistance to schools and teachers with the integration of environmental education into the classroom, as demonstrated by the New Jersey Core Curriculum Content Standards and Frameworks;
- Establishment of the Inter-agency Work Group, as required by the enabling Act. The Work Group is made
  up of state representatives and is charged with publicizing model environmental education programs;
  identifying environmental education resources available within state government; and, providing leadership
  and soliciting partnerships to assist the commission in its work;
- Evaluation of New Jersey programs and progress for environmental education as compared to other states and as a basis for the first annual report required by the legislation;
- Establishment of an environmental education web site, including an electronic network of environmental education resources located at <a href="http://ceaedep.rutgers.edu">http://ceaedep.rutgers.edu</a>; and,
- Ongoing review and update of the *Environmental Education in New Jersey: A Plan of Action*.

Interestingly, New Jersey's statewide environmental education efforts compare favorably with other states. In a University of Wisconsin - Stevens Point survey conducted of states that had the most effective environmental education components, New Jersey had 8 of 16 components already in place. These components include a statewide environmental education master plan; an environmental education advisory council; an inter-agency work group; an environmental education act; a state environmental education office/staff; state level environmental education centers; a state environmental education association; and, environmental education learner objectives/outcomes.

## **Commission Priorities for the Future**

Comprehensive environmental education for all ages is needed to ensure environmental quality and sustainable practices and planning in New Jersey.

Commission priorities are determined by its enabling legislation and reflected by implementation of *Environmental Education in New Jersey: A Plan of Action*, and the commission members' diverse expertise in environmental education. The following activities are proposed and are to be accomplished within the next 3 to 5 years:

- Maintain, monitor, and implement *Environmental Education in New Jersey: A Plan of Action*;
- Enhance and maintain the environmental education web site and network;
- Convene a Global Forum or similar forum;
- Celebrate New Jersey Environmental Education Week and Earth Day annually;
- Maintain involvement in educational reform with a focus on environmental literacy;
- Provide an annual report and technical assistance to the Governor and State Legislature on environmental education activities;
- Design and coordinate a 1-day forum for academicians relating to environmental education;
- Provide oversight of pre-service teacher training relating to environmental education;
- Develop and coordinate enrichment opportunities for formal and non-formal educators;
- Work with the corporate sector, municipal and local governments, and religious organizations to identify
  environmental education links and partnerships; and,
- Develop an environmental education awards program.

## Introduction to 1998 Highlights of Environmental Education Activities

The Commission is pleased to report on the people and programs in 1998 that nurtured progress toward an environmentally literate citizenry in New Jersey.

Highlighted environmental education activities in this report illustrate that environmental education is important to a full range of New Jersey citizens. From students to seniors, government offices to corporate headquarters, families to religious and professional organizations - all are working to implement *Environmental Education in New Jersey: A Plan of Action*.

Some programs are new initiatives while others are ongoing or long-term and were sustained in 1998. All of the efforts highlighted in this report attained significant achievement in environmental education.

For ease of reference, highlights are categorized in accordance with the ATarget Audience≅ listing outlined in *Environmental Education in New Jersey: A Plan of Action*, the master plan for statewide environmental education.

These highlights were not selected to be inclusive but rather to demonstrate the depth and breadth of activity throughout the state. The Commission wishes to impress upon the reader the broad spectrum of activities outlined in the following pages, which took place in 1998 throughout New Jersey.

The Commission encourages anyone who knows of organizations, schools, corporations, nature centers, etc., having environmental education activities that should be included in the 1999 annual report, to please contact the New Jersey Commission on Environmental Education (see cover).

The accomplishments outlined in this report are in most cases, discrete activities, touching only the participants. There is no network in the state that connects one effort to another. Often videos are produced, seminars are held, or pamphlets are prepared, which could be useful to a much broader audience than are reached, but these efforts are not always shared. Hence, similar efforts often overlap.

Recognizing that there are great resources and talents in New Jersey which need to be shared, and that thousands of citizens need to receive environmental information or resources, the Commission is developing an environmental education web site. This site will include a directory of these resources, expertise, programs and opportunities. It is critical that the Commission solicit and receive funding to support the development and maintenance of this resource, in order to reach, coordinate and network a much broader audience across the state.

## Highlights: Individuals and Families

Of the 13.5 million visitors to the New Jersey Department of Environmental Protection=s (DEP) Division of Parks and Forestry sites in fiscal year 97 (7/97 - 6/98), 776,541 enjoyed some type of interpretive or environmental education programming. These programs are offered at 6 interpretive centers and 20 historic sites.

A statewide campaign by a coalition of 300 organizations resulted in voter approval statewide of the Open Space Referendum as well as support of 23 municipal and 67 county open space preservation funds.

Over 30,000 people visited the DEP=s Division of Fish, Game and Wildlife's Pequest Trout Hatchery and Natural Resource Education Center in Oxford (Warren County). This included participation in 53 weekend public programs, 97 fishing education programs and tours taken by 157 organized groups.

In autumn, 1998, the New Jersey Marine Sciences Consortium introduced AFamily Science Exploration in the Marine Environment≅ in direct response to parents' inquiries about worthwhile activities to do with their children. Over 300 individuals enjoyed the six weekend programs.

Over 42,000 citizens participated in the NJ Harbor Heritage Festival, a 2-day celebration of the Hudson River Waterfront, sponsored by a coalition of government, business and non-profit groups based at Liberty State Park in Jersey City.

## Highlights: Office of the Governor

The Governor=s School for the Environment entered its 10th year with enrollment of 90 scholars selected from a competitive field of 200 applicants from high schools statewide. The highlight of the year was a visit from Governor Christine Todd Whitman.

In celebration of the importance of the environment, Governor Whitman proclaimed April 22, 1998 as Earth Day and April 19 - 25, 1998, as New Jersey Environmental Education Week.

The Inter-agency Work Group on Environmental Education was established and was directed to begin work to conduct a biannual inventory of environmental education resources in state agencies.

In response to requests made by the State Soil Conservation Committee, Governor Whitman proclaimed April 26 - May 3, 1998 Soil and Water Stewardship Week in New Jersey. The proclamation recognized the work of the conservation districts and urged citizens to help protect the environment through the wise use of soil and water resources.

## Highlights: The New Jersey State Legislature

As part of the Clean Air Act Amendments of 1990, New Jersey must implement an Enhanced Inspection and Maintenance (I/M) program for automobiles in order to improve air quality. The State contract awarded to a vendor to implement the program required the vendor to dedicate 1% of the contract price (\$15 million over the life of the contract) to public education and outreach. This clause in the contract was added by the state government agencies involved because of the importance of New Jersey citizens understanding the connection between public health, air quality and the use of automobiles.

# Highlights: The New Jersey Commission on Environmental Education and the Inter-agency Work Group

The Commission, in partnership with The Alliance for New Jersey Environmental Education and the Center for Environmental and Agricultural Education at Cook College, Rutgers University, launched an environmental education web site at <a href="http://www.ceaedep.rutgers.edu">http://www.ceaedep.rutgers.edu</a>.

In accordance with mandates established in its enabling legislation, the Commission developed a letter of introduction and fact sheet about its activities, which were distributed to members of the New Jersey State Legislature.

The Commission was an active participant in the Open Space education campaign, as a member of the Coalition to Preserve Open Space.

The Inter-agency Work Group was established, as called for in the enabling legislation, and began work on an inventory of environmental education resources provided by state agencies for members of the public.

## Highlights: The State Department of Education

A representative of the New Jersey Department of Education (DOE) participated in the State Education and Environment Roundtable (SEER), sponsored by the Pew Charitable Trusts. SEER conducted a study of 40 schools nationwide (3 of which were in New Jersey) regarding use of the environment as an integrating concept for learning. It was discovered that schools using the environment as part of a school-related program witnessed enhanced student achievement, reduced disciplinary problems and improved student learning attitudes.

For the first time in state history, measures of student proficiency relative to science and environmental standards were available from statewide assessment findings for 4th and 8th grade.

The full impact of the State Core Curriculum Content Standards (CCCSs) was felt by school districts in 1998. Teachers were exposed to additional opportunities for environmental education enrichment, and there was heightened interest in environmental education, as teachers felt more comfortable including it as a legitimate classroom initiative.

Implementation of the CCCSs has resulted in environmental education becoming a professional development category for teachers.

The CCCSs have opened doors for special education students to participate in environmental education, resulting in increased inclusion of special education students in classroom programs by 50%.

## Highlights: The State Department of Environmental Protection

Over 500 people participated in weekend and one-day events to gain skills and knowledge about outdoor sports as part of the New Jersey Department of Environmental Protection (DEP) Division of Fish, Game and Wildlife's ABecoming an Outdoors-Woman≅ programs.

Project WILD, Aquatic WILD, and WILD School Sites workshops were offered to 375 teachers through DEP's Division of Fish, Game and Wildlife (DFGW). Project Learning Tree workshops were held for 437 teachers through DEP=s Division of Parks and Forestry. The projects are supplementary environmental education activity guides that are easily incorporated into many subject areas, and provide support for the State Core Curriculum Content Standards. The projects, which are distributed nationally, are award-winning and useful in all school settings.

DFGW offered its annual Coastal Workshop for Teachers for the 19th year. More than 1000 teachers have attended this weekend workshop since its inauguration. More recently, the division began a series of teacher workshops at a newly acquired coastal facility called the Sedge House. Ten workshops at the Sedge House will be scheduled each summer.

## Highlights: The State Department of Environmental Protection (Con=t)

The DEP Division of Science and Research, in cooperation with the DFGW, Hackensack River Keeper, New Jersey Sea Grant, New Jersey Community Water Watch, and the Greater Newark Conservancy, conducted four Urban Youth Water Quality Monitoring/Fishing Programs in four communities in the Newark Bay Complex during summer, 1998. Approximately 100 children from Bayonne, Elizabeth, Perth Amboy and Newark participated in the four-day program. The goal of the program was to build an awareness of the complexity and inter-related nature of the Harbor/Bight ecosystem through both classroom and hands on contact with local waters, including a day of fishing at a local public access fishing site within the community. The program was funded through a grant from the John Neu Family Foundation.

The DEP Office of Communications received a grant of \$35,000 from the federal Environmental Protection Agency to support educational reform in the state and to enhance DEP=s enrichment workshops for teachers in New Jersey. The grant project was designed to provide support for the state Core Curriculum Content Standards (CCCSs) through environmental education materials and training. Funds were used to pay for for the correlation of environmental lessons in Project Learning Tree, Project WILD, Aquatic WILD and Project WET, with the CCCSs. Monies were also used to pay for a multiple-day facilitator training program, a teacher survey, eight enrichment workshops, and materials.

Earth Day 1998 boasted of dozens of school and community-based events statewide, focusing on various environmental topics and issues. A master list was maintained by staff in the DEP Office of Communications in order to network volunteer, media and participation interests.

This year marks the fourth anniversary of the EnvironMentors Project in New Jersey. The mission of this project is to work with high school students of all backgrounds to expose them to various environmental learning and career interests through one-on-one mentoring and hands-on project development. DEP staff, along with employees from 19 companies, served as mentors to students from Princeton and Trenton high schools.

Included in the DEP's strategic plan for 1998 - 2001 is its continued commitment to environmental education - "to design creative programs for educators with emphasis on the state's environmental priorities that support the environmental content and skills that must now be taught statewide through the curriculum standards." Other strategies in the plan focus on outreach and measuring citizen knowledge and behavior regarding priority environmental topics.

The DEP improved on methods of public outreach and delivering environmental information to the public. The agency produced the first of its kind report measuring environmental quality in the state. Entitled "New Jersey's Environment 1998," the report conveys scientific information and data through easy-reading text and graphics, noting how individuals can help to resolve environmental concerns. The report was well received by secondary schools statewide. The DEP also revitalized its own Public Access Center, thereby improving public information accessibility.

## Highlights: The State Department of Health and Senior Services

The New Jersey Department of Health and Senior Services (DHSS) provided awareness seminars to numerous community based organizations and their constituents across the state throughout the year. The seminars covered a wide range of environmental health topics, including lead-based paint, childhood asthma, and indoor contaminants. DHSS staff also accompanied AIDS educators in disseminating information to their program participants.

The department also provided training seminars for physicians and health care workers regarding children's exposure to environmental health contaminants. As part of its community education project within the Consumer and Environmental Health Services, the DHSS continues its efforts in providing the latest information on environmental health issues to the medical community through these seminars and the development of educational materials.

## Highlights: The State Department of Agriculture

The Department of Agriculture (DOA), The State Soil Conservation Committee, The New Jersey Association of Conservation Districts and other conservation groups conducted the 5th annual New Jersey Conservation Coalition Envirothon. This statewide competitive educational event is offered to students in grades 9 - 12 and tests their knowledge of natural resource and environmental issues, including soils, forestry, aquatics, wildlife ecology and environmental quality. The Hopewell Valley Central High School Envirothon team placed first among the 25 New Jersey teams and went on to place 11th out of a field of 43 competitors in the international competition.

In cooperation with other conservation organizations and local conservation districts, the DOA State Soil Conservation Committee conducted the Annual Conservation Education Essay and Poster Contest, which involved several thousand school students. The 1998 theme was "Improving the Environment Around My School." Eighteen state level winners were honored at a State ceremony on May 29, 1998. Poster contest winners also participated in a national competition.

Mr. John Moore from the Burlington County Institute of Technology was selected as the 1998 New Jersey Conservation Education Teacher of the Year.

The New Jersey Association of Conservation Districts presented the Memorial Conservation Scholarship award to Mr. Richard Ochs. This scholarship is presented to college students pursuing a career in natural resources.

Throughout the year Soil Conservation District professional personnel provided conservation education assistance to local schools, community organizations and individuals. This one-on-one contact resulted in the extensive delivery of conservation education information to hundreds of individuals throughout the state.

## Highlights: Federal and Government-related Activity

In 1998 the federal Environmental Protection Agency (EPA) awarded \$180,810 in Environmental Education Grants to recipients New Jersey. The EPA National Environmental Education Office awarded \$110,000 to the Robert Wood Johnson Medical School. The EPA Region II Environmental Education Office awarded seven grants totaling \$70,810 to four non-government organizations (\$67,675 total), and three local governments or agencies (\$13,135 total). The awards supported a range of projects, including the translation of an environmental risk educational program into Spanish; teacher training; and an educational program involving use of the Geographic Information Systems, stream monitoring, and student mentoring. This is a grant program under Section 6 of the National Environmental Education Act of 1990.

Over 350 people registered for the Pinelands ninth annual Short Course. The course is co-sponsored by the Pinelands Commission and the Continuing Professional Education Office, Rutgers University. Participants attending this day-long event had the opportunity to learn numerous fascinating aspects about the Pinelands region, including fire protection and management, cranberry growing, Pinelands wildlife, and the Jersey Devil.

A new publication was designed to help Pinelands residents with their landscaping techniques. Entitled "Pinescape,≅ it covers landscaping fundamentals, landscape planning and plantings, and water conservation savings through use of native plants. Other publications available about the Pinelands region include the commission's brochure, a guide entitled "Pinelands Guide B Recreational Opportunities, Historic Sites, Nature Centers and Field Trips," and the "Speakers Directory," which lists 51 qualified speakers who are knowledgeable about a variety of Pinelands topics.

The Hackensack Meadowlands Development Commission (HMDC) Environment Center hosted over 1,000 educators in professional development workshops in 1998, including three delivered via interactive television to sites in Bergen, Hudson and Morris counties. This was a pilot program which established a professional development model for teachers on wetlands environmental education and how to integrate living laboratory activities into the classroom, in support of the New Jersey Core Curriculum Content Standards. Funding for this project was provided by the federal EPA Region II Marine and Wetlands Protection Branch. The HMDC Environment Center was the recipient of the federal EPA Region II Environmental Quality Award for 1998.

The South Jersey Environmental Information Center (SJEIC), a state program in the West Deptford Library, celebrated its 7th year of providing accurate, timely and neutral information on the environment for all New Jersey citizens. The Center is the first point of contact for those looking for environmental information, and maintains a network of contacts in many fields that may be used as resources to find additional information. The Center is one of a handful of environmental centers across the U.S. and serves as a model for future projects of its kind.

## Highlights: County and Municipal Government

The total number of visitors to county and municipal parks in 14 of the state's counties was estimated at over 21 million persons.

Somerset County Park Commission=s Environmental Education Center developed a corporate volunteer program to heighten corporate volunteer knowledge of the importance of habitat through the creation of new outdoor learning sites at the Center. Over 900 hours of volunteer time were donated toward this effort in 1998.

The Somerset County Recycling Program developed a \$15,000 environmental improvement grant program to assist county schools in upgrading their solid waste programs.

New Jersey local boards of health conducted numerous education and outreach programs to promote public health and protect the environment. Significant education programs included training food handlers to prevent food borne outbreaks, promoting recycling, and educating residents about how to maintain their septic systems.

## Highlights: Two- and Four-year Institutions of Higher Learning

The Environmental and Occupational Health Sciences Institute (EOHSI) is a joint program between Rutgers University and the University of Medicine and Dentistry of New Jersey. The EOHSI Resource Center trained 420 K - 12 educators in 1998, using the award winning ToxRap (Toxicology, Risk Assessment and Pollution) materials. This curriculum series introduces students to the principles of toxicology and the process of risk assessment.

The EOHSI Centers for Education and Training trained over 3,000 professionals, educators and workers on environmental and occupational safety and health issues in 1998 by providing one- to five- day continuing education courses.

The New Jersey Statewide Systemic Initiative (NJ SSI) at Rutgers University published a Resource Guide to Informal Science Education Agencies. The guide includes nature and environmental education centers and is based on the understanding that work done by these organizations for students, families and community members strengthens science education in schools.

The School of Conservation, the environmental field campus of Montclair State University, provided resident programs in environmental education to 8,000 elementary school students and over 1,000 teachers in 1998.

## Highlights: Two- and Four-year Institutions of Higher Learning (Con=t)

The following colleges/universities offered environmental education methodology as part of their pre-service teacher instruction: Montclair State University, Rutgers, the State University, College of New Jersey and Rowan College.

Since 1993, teachers have had the opportunity to participate in New Jersey Audubon Society's college course entitled "Environmental Education in the Elementary Curriculum" at Rutgers University and Ramapo College.

Supplementary workshops using environmental education activities and methodologies found in Project WET, Project WILD, Project Aquatic WILD and Project Learning Tree were offered to 311 pre-service teachers at the following colleges: Brookdale Community College, College of New

Jersey, Cook College, County College of Morris, Drew University, Georgian Court College, Mercer County Community College, Middlesex County Community College, and Ramapo College.

## Highlights: School Governance and Administrations

The New Jersey Sustainable Schools Network was organized in 1998 by Global Learning, Inc., a non-profit educational organization. Among the network's current 40+ organizational members are the New Jersey School Boards Association and the New Jersey Principals and Supervisors

Association. The network is helping schools become more environmentally sustainable in terms of the operation of their facilities and grounds, their curriculum, extra-curricular activities, professional development of staff, construction and renovations, purchasing practices and transportation.

School Leader Awards from the New Jersey School Boards Association in 1998 included recognition given to the Sparta Alpine School district which, as part of its comprehensive environmental education program, set aside five acres of land representing five different habitats existing in New Jersey.

## **Highlights: Educators**

New Jersey Audubon Society's publication, "Bridges to the Natural World," a statewide habitat curriculum guide, completed its 6th year, having been distributed to over 2,500 teachers statewide.

Forty-seven new teacher/facilitators joined the ranks of Project Learning Tree, Project WILD, Aquatic WILD, and Project WET workshop leaders during the training session held at the Hackensack Meadowlands Development Commission Environment Center. As of 1998 there were 140 facilitators statewide to help implement these national environmental education programs.

## **Highlights: Educators (Con=t)**

About 159 K-12 educators from throughout New Jersey participated in EOHSI's 5th annual Environmental Health Sciences Summer Institute for Educators. This series of free one- and two-day workshops, endorsed by the New Jersey Education Association, is centered around EOHSI's award-winning environmental health sciences curricular materials and offers methods to integrate lessons into existing curricula. The institute includes roundtable discussions with scientists and a tour of research laboratories.

Approximately 75 K - 9th grade educators participated in the Environmental and Occupational Health Sciences Institute's (EOHSI) unique ToxRAP Network train-the-trainer model, in collaboration with the Southwest Environmental Health Sciences Center at the University of Arizona. This national program focuses on EOHSI's award-winning ToxRAP (Toxicology, Risk Assessment and Pollution) curriculum series which introduces students to the principles of toxicology and the process of risk assessment. Participating New Jersey school districts/educational organizations include the Educational Information and Resource Center, Little Egg Harbor, North Arlington, Bloomfield, Bridgewater-Raritan, Midland Park and Montgomery Township.

The New Jersey Schoolyard Habitat Coalition helped a number of schools create outdoor learning and wildlife enhancement sites on school grounds through partnerships with students, teachers and community groups.

The National Science Teachers Association launched a program called "Building a Presence for Science" with funding from the Exxon Foundation. This initiative seeks to establish a contact in every school building in the New Jersey to enhance science teaching through compliance with the state standards. A statewide coordinator has been appointed and the program began implementation in New Jersey in 1998.

## Highlights: The New Jersey Education Association

The New Jersey Education Association (NJEA) supported the NJ Commission on Environmental Education's master plan for environmental education, through its Environmental Education Committee. The Committee members helped teachers implement the State Core Curriculum Content Standards related to environmental education through professional development opportunities at NJEA'S annual Convention and annual Spring Environmental Education Conference. An NJEA member was designated to sit on the Commission.

## Highlights: Business and Industry

Public Service Electric and Gas Company (PSE&G) offered AIn Concert With The Environment,≅ a traveling multi-media environmental and energy education program for middle and high school students. An interactive computer program asks students to enter data about actual energy use in their homes and teaches them how to conserve energy. Over 8,198 students from 15 schools throughout PSE&G's service territory participated in the In Concert program in 1998. PSE&G also provides environmental education grants to teachers of grades K - 9, in partnership with the New Jersey Business, Industry, Science, Education Consortium. Over \$153,000 has been awarded to 77 teachers since the program's inception in 1991.

The Education Committee of the New Jersey Chemical Industry Council hosted the following events in 1998: The Chemical Careers Conference - a forum for students throughout the state to gain an understanding of careers in the sciences; and, the Teachers, Industry and the Environment (TIE II) Conference for grades K B 4, a hands on, interactive workshop that provided teachers with information to teach science and environmental experiments to students. Participating teachers in the TIE II program also received necessary tools with which to perform these experiments in the classroom.

A new partnership has been created to recognize corporate environmental citizenship. Corporations for Conservation of Wildlife showcased companies' annual support to the Conserve Wildlife Foundation's outreach, education and promotions project on behalf of the state's endangered and threatened wildlife. Wakefern Food/Shop-Rite Supermarkets, South Jersey Gas Company, DKB and Partners, and McCarter and English were acknowledged in 1998.

The New Jersey State Chamber of Commerce, in an effort to educate local government officials and others, developed a video explaining how dredging materials can be decontaminated and disposed of properly.

The New Jersey State Chamber of Commerce has been working cooperatively with businesses, legislators, local government officials, regulatory agencies and environmental groups to develop legislation that would enable the redevelopment of brownfields. As a result of their combined efforts, Governor Whitman signed into law in January, 1998 Senate Bill #39 titled the "Brownfields and Contaminated Site Remediation Act." In order to inform and educate interested parties about this important legislation, the State Chamber of Commerce and the State League of Municipalities held a joint conference in March, 1998, which 200 people attended.

Approximately 150 K-12 educators were trained on EOHSI's award-winning environmental health sciences curricula materials through various training initiatives, including the Corporate Adopt-a-School Program. Workshops are tailored to meet the specific needs of the school district and are conducted on-site. Participating New Jersey school districts include Toms River, Carteret, Middlesex, Nutley and New Brunswick.

## Highlights: Business and Industry (Con't)

Merck's world headquarters in Whitehouse Station, New Jersey, received certification by the non-profit Wildlife Habitat Council for significant achievement in the creation of wildlife habitat on its campus. Merck employees and community residents formed a volunteer wildlife team to plan habitat projects on site. The Merck Foundation also bestowed a Champions of the Environment grant to enable Readington Township students to study the environment of the Cold Brook School historical site in the township.

Through a partnership between PSE&G and the New Jersey Business, Industry, Science and Education Consortium (NJBISEC), the PSE&G/NJBISEC Environmental Education Grant Program provided eight grants statewide to teachers to implement projects that connect environmental education with the teaching of math, science, computer science and/or technology. Included were: Nature's Little Helpers, a science project studying the value of insects for pre-K – 6 students at the Harriet Tubman Elementary School in Newark; The Jacque Cousteau Kids, a program for special education students at the Horizon School in East Orange that acquaints them with marsh, marine and coastal habitats and the animals that inhabit them; Courtyard Ecosystems for grades 3 - 4 students from Jefferson Elementary School in West Caldwell, to develop an outdoor classroom; Aphid Vacuum, a program for pre-K and kindergarten students from Winfield School that teaches the value of a beneficial insect; and, Habitats are Fun, which teaches the value of New Jersey habitats.

American Re-Insurance Company spearheaded BEES (Building Environmental Education Solutions), an environmental education program giving New Jersey high school students the opportunity to examine environmental issues in their community in-depth, in a multi-disciplinary and multi-stakeholder manner, using a hands-on approach and a variety of technology tools. Gracelynn Johnson, the lead teacher for the BEES program at Camden High School, won the 1998 Union Camp Gene Cartledge Award for Excellence in Environmental Education. She was recognized nationally for her program that "created an innovative and multi-disciplinary curriculum which gives her inner-city students hands-on experience learning about the important relationship between the Cooper River and the city of Camden."

AT&T provided environmental information and awareness to NJ communities through a variety of avenues in 1998. First, it conducted outreach through its AT&T Environment, Health and Safety Internet web site. Its second avenue was through employee engagement, one example being AT&T's vice president of quality serving as co-chair of Quality New Jersey (QNJ) Another example is employee volunteerism through AT&T CARES, where employees use a paid-work day to volunteer at environmental and other community projects. Its third avenue was through the development of educational curricula, such as co-chairing the National Environmental Education & Training Foundation Institute for Corporate Environmental Management initiative to create an industrial ecology curriculum for the U.S. community college system. Its fourth avenue was the support of educational initiatives, such as industrial ecology research at Princeton University and the EnvironMentors chapters in Trenton and Princeton.

## Highlights: Business and Industry (Con't)

For the past six years, Johnson & Johnson supported the work done by the Environmental Health Sciences Institute (EOHSI), which has included the introduction of environmental health education into the curriculum in the New Brunswick Public Schools. Over 200 teachers and 6,500 students and their families have been involved with this program.

Lucent Technologies provided funding and technical support to New Jersey educational institutions to advance the quality of their environmental and educational programs. Both Rutgers University and the New Jersey Institute of Technology (NJIT) have been recipients of NSF (National Science Foundation) and Lucent Industrial Ecology Research Fellowships that provide \$100K over a 2-year period for each grant. In addition, Lucent worked closely with the NJIT in the development and steering of its Multi-Lifestyle Engineering Research Center and provided direct/indirect funding of over \$100,000 during 1998 for specific environmental research projects.

## Highlights: Environmental Organizations and Advocacy Groups

New Jersey Audubon Society's' (NJAS) seven sanctuaries statewide hosted an average of 40,000 children and 600,000 adults in 1998 through field trips, classroom workshops, outreach lectures and web sites.

The Environmental Endowment for New Jersey awarded 37 grants totaling \$401,030 to non-profit organizations to carry out a variety of projects in the Northeast metropolitan area and in the Delaware River Basin. Many of the projects focused on education. Some examples included: Baykeeper-American Littoral Society (\$20,000) to design and implement a grassroots organizing campaign to preserve wetlands in the Hackensack Meadows; Federation of Gloucester County Watersheds (\$3,000) to conduct public awareness and education programs about watersheds and to expand water quality protection in the region; and, Isles, Inc. (\$7,000) to link existing education offerings at the Cadwalader Park Environmental Education Center to the Delaware River.

In an effort to promote family learning, Isles, Inc. continued it's successful Family Hike Program in Cadwalader Park, with 15 hikes during the summer, reaching over 200 new residents. Through these programs, Isles, Inc. also worked to have residents teach about their first-hand experiences in the city as they relate to the environment. Through its Affordable Housing Program, Isles, Inc. implemented two new strategies. As part of the new homeowner enrichment classes, the Environmental Education program held sessions for new homeowners on an "Environmentally Friendly Home," including topics such as recycling, water filters, energy-efficient light bulbs, houseplants and gardening. Isles, Inc. also included a clause in its contracts with builders of new housing projects in the city, to mandate that the builders' landscapers work with the Isles Environmental Education program. Through this the landscapers would partner with residents and/or local schoolchildren and teachers to install trees or plant material, thereby promoting stewardship of the environment.

## Highlights: Environmental Organizations and Advocacy Groups (Con't)

Partnership projects on habitat study and bird migration took place under the auspices of the New Jersey Audubon Society, in cooperation with Ramapo College, the Educational Information And Resource Center (E.I.R.C.), BEES (Building Environmental Education Solutions) and the New Jersey Conservation Foundation.

## Highlights: Professional and Non-Academic Organizations

The Alliance for New Jersey Environmental Education (ANJEE), a membership alliance for individuals interested in education about the environment, provided a quarterly newsletter highlighting environmental education opportunities state and nationwide, conducted an annual conference and leadership retreat for members and sponsored attendance at the national environmental education convention in 1998. Successful implementation of the tasks outlined in *Environmental Education in New Jersey: A Plan for Action* was carried out through the award of funds to ANJEE to initiate the Environmental Education Directory and web site.

ANJEE and the New Jersey Audubon Society annually honor outstanding Environmental Educators through a statewide awards program. The ANJEE awardees for 1998 were Alton McDermot, Ocean County Park System, (non-formal educator); Partricia Orban Quinby, The Delaware and Raritan Greenway (non-formal educator); and Teresa Santiago, Perth Amboy School District (formal educator).

As an affiliate of the Alliance for New Jersey Environmental Education, the Coalition for Schoolyard Habitat provided networking between teachers and natural resource professionals to enhance schoolyard habitats for wildlife and learning. Begun in 1996, the Coalition had 283 teachers and principals and 89 resource people on the data base; interest in developing outdoor classrooms to meet the State Core Curriculum Content Standards has greatly increased.

The Watershed Partnership for New Jersey published and distributed the New Jersey Watershed Education and Resource Directory. The directory was funded by a grant from DEP and corporate support from GPU Energy, PSE&G, Killam Associates and HydroQual, Inc.

Members of the New Jersey Health Officers Association had several meetings with the New Jersey Department of Environmental Protection to develop plans to inform local boards of health and mayors about the Environmental Protection Agency Cumulative Exposure Project data that estimates for New Jersey residents the health risks for selected hazardous air pollutants.

## Highlights: Cultural and Historic Organizations

New Jersey Network (NJN), in conjunction with the DEP Division of Fish, Game and Wildlife produced a 30-minute documentary film on the white-tailed deer in New Jersey. Titled "Deer Crossing," this production highlights the history of the state's deer herd and its interaction with people.

## Highlights: Civic, Service and Volunteer Organizations

Members of the largest group of volunteers in the state dedicated to fish and wildlife conservation, the Wildlife Conservation Corps, contributed \$1.3 million in services to the Division of Fish, Game and Wildlife in 1998.

The Federated Garden Club of New Jersey contributed \$2,000 in scholarship aid to graduate students enrolled in summer environmental education courses at Montclair State University School of Conservation.

## **Highlights: Students and Youth Organizations**

New Jersey's 11 Girl Scout councils offered diverse programming, including environmental education, to girls statewide throughout the year. Nine of the councils offer summer day camp, with nearly 2,000 girls participating, and resident camping, with nearly 4,000 girls participating.

New Jersey's 12 Boy Scout councils offered diverse environmental education programs to over 100,000 youth members. These programs were led by over 20,000 adult volunteer leaders. Programs included community cleanups, a comprehensive cleanup of Route 31 from Trenton to Butzville, stream bed maintenance, trail maintenance and reclamation projects, and thousands of hours of environmental service projects and education. Environmental Science merit badges were earned by over 600 scouts, in such areas as Energy, Forestry, Fish & Wildlife Management, Geology, Mammal Study, Nature, Plant Science, Reptile Study, and Soil & Water Conservation. Several hundred Cub Scouts earned the World Conservation Award.

## Christine Todd Whitman, Governor

State of New Jersey

## New Jersey Commission on Environmental Education, 1998

## Louis Iozzi, Ed.D.

Cook College, Rutgers University

#### John Kirk, Ph.D.

New Jersey School of Conservation, Montclair State University

#### Helen Skerratt

Sharon School

## Kathleen McLaughlin

Arthur Rann Middle School

#### Suzanne Willis

Hunterdon Central Regional High School

## Patricia Hanratty, Ed.D.

George Washington School

#### David Nash

New Jersey Principals and Supervisors Association

## Don Haberstroh

Partners for Environmental Quality

## James Shissias

PSE&G

## Frank Gallagher

Alliance for New Jersey Environmental Education

#### Barbara Rich

Association for New Jersey Environmental Commissions

#### Pat Kane

New Jersey Audubon Society

#### Elaine Puzo-Castoro

Newark Museum

## New Jersey Commission on Environmental Education, 1998 (Con't)

#### **Karen Wintress**

American Re-Insurance Co.

## Barry Schlegel, CIH

Environmental and Occupational Health Sciences Institute

#### Emile DeVito, Ph.D.

New Jersey Conservation Foundation

#### Anne Galli

Hackensack Meadowlands Development Commission Environment Center

#### Joan Elliot

New Jersey Department of Agriculture

#### Sam Race

New Jersey Department of Agriculture

#### **Christine Keresztury**

West Deptford Public Library

#### Eileen McGinnis

Policy and Planning, Office of the Governor

#### Tanya Oznowich

New Jersey Department of Environmental Protection

#### Joseph Eldridge

New Jersey Department of Health and Senior Services

#### Toni Hendricksen

New Jersey Department of Law and Public Safety

## Raymond Mueller, Ph.D.

Richard Stockton College of New Jersey

## Inter-agency Work Group - 1998

## Anthony Cancro Jacques Lebel

New Jersey Department of Community Services

#### Mimi Dunne

New Jersey Department of Environmental Protection

#### Lynn Keepers

New Jersey Department of Human Services

#### Paul Kaleda

New Jersey Department of Labor

## George Schlosser

New Jersey Department of Law and Public Safety

## Joseph Eldridge

New Jersey Department of Health and Senior Services

#### Richard Belcher

New Jersey Department of Agriculture

## Tanya Oznowich

New Jersey Department of Environmental Protection